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ABSTRACT

The paper reviews the literature on the use of guidelines to identify handicapped children, especially learning-disabled (LD) children, for special programs. Dangers of misidentification of learning-disabled children through rigid use of discrepancy formulas are reported. The paper reviews studies which support: the use of Bannatyne's four factor recategorization model for learning disability identification; the use of diagnostic tests in conjunction with familial and cultural information to distinguish between LD and non-LD children; and the use of standard score and achievement discrepancies in determining eligibility for placement in LD programs. The paper also calls for consideration of the student's attention characteristics, methods of organizing and processing information, and the presence of specific behavior deficits. (11 references) (DB)

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Identifying Children for Special Programs

Are Guidelines Answering the Needs?

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Identifying Children for Special Programs

Are Guidelines Answering the Needs?

ABSTRACT

Since 1977 handicapped children have been identified according to PL 94-142 and placed in exceptional children's classes. Research has indicated the procedures used to classify children often led to misidentification, particularly in the case of learning disabled children (Lichenstein, 1982; McKinney, in press). The studies reviewed show the utility of Bannatyne's four-factor recategorization model for LD (Webster & Lafayette, 1980); differentiation between LD and non-LD children utilizing diagnostic test in conjunction with familial and cultural information (Webster and Schenck, 1979); and the use of standard score and achievement discrepancies in determining placement in LD programs (McKinney, in press; McKinney and Feggans, 1986). A "cookbook" method may distinguish between the more severely handicapped children but there are at-risk learners who are likely to fail that do not qualify with this method. Other considerations as to how students attend, how they organize information, information processing, and specific behavior deficits as compared to content deficiencies must be made before a final classification can be determined.

Identifying Children for Special Programs - Are Guidelines Answering the Needs?

The prospect of efficiently and effectively educating children is greatly complicated by the problems of poverty, teenage drop-outs and pregnancy, single parents homes, drug abuse, and suicides (Conference, 1987; Hornbeck, 1987). Since 1977 more severely handicapped children have been identified according to PL 94-142 and placed in exceptional children's classes. Research has indicated that the procedures used to classify children often led to misidentification, particularly in the case of learning disabled children (Lichenstein, 1982; McKinney & Banerjee, 1975). The lack of concrete, specific criteria has resulted in assessment procedures that have confused learning disabled students with low socio-economic achievers (Alozzine & Ysseldyke, 1983).

PL 94-142 stipulates stringent procedural regulations for identification of handicapped youngsters. Yet, in the operational distinctions and classifications of all handicapped youngsters and particularly learning disabled (LD) children there remains a good deal of confusion. The most ambiguous area involves distinguishing children with learning disabilities from those who are slow learners or low achievers. This lack of a clear, operational, and concrete definition has frequently resulted in a failure to identify children who are disabled learners (Algozzine & Ysseldyke, 1983; Goodman, 1985; Lichtenstein, 1982; Lichtenstein & Ireton, 1984; McKinney, in

press; Webster & Schenck, 1979; Webster & Lafayette, 1980).

Webster and Lafayette (1980) examined the utility of Bannatyne's four-factor recategorization model in differentiating among students classified as LD, emotionally disturbed, or educably mentally handicapped. Bannatyne's system suggested that dyslexic readers could best be analyzed by evaluating their intellectual profile on the WISC or WISC-R using these three categories: Sequential (Picture Arrangement, Digit Span, and Coding) which measured the ability to store and retain visual and auditory information within short-term memory; Conceptual (Comprehension, Similarities, and Vocabulary) which measured verbal comprehension ability; and Spatial (Block Design, Object Assembly and Picture Completion) which measured the ability to recognize spatial relationships and work in the non-verbal mode. Later this system included a fourth category, Acquired Knowledge (Information, Arithmetic, and Vocabulary). Studies showed that reading and learning disabled students tended to perform in the following pattern, from highest to lowest scores: Spatial, Conceptual, Sequential, and Acquired Knowledge.

Webster and Lafayette examined the case files of 401 students in grades four through six who had been labeled as either LD (n=294), emotionally disturbed (n=71), or educably mentally handicapped (n=36). The scaled scores from each individual WISC-R test were recategorized according to Bannatyne's four-factor scheme. A stepwise discriminant

functions analysis was used to determine the extent to which this four factor model differentiated among the three identified groups of handicapped learners (Webster & Lafayette, 1979).

Results indicated that 99.7% of the students actually labeled by the school special services personnel as LD would be predicted to be LD with only one student from this group not having a Bannatyne Profile similar with the group. The discriminant analysis also indicated that 100% of the members of the emotionally disabled (ED) and educably mentally handicapped (EMH) groups would be predicted to be LD on the basis of the recategorization procedure.

Use of this method resulted in a clear overclassification of non-LD students as LD. Even though this method is purported to differentiate normal learners from handicapped learners, it is of no value in distinguishing specific subgroups of handicapped learners (Webster & Lafayette, 1980).

This further documents the futility of "cookbook" methods in diagnosis. Interpretation of performance on norm-referenced testing must be supplemented by analysis of the student's actual behavior and learning styles and strategies in real-life settings (Webster & Lafayette, 1980).

Webster and Schenck (1979) examined diagnostic test data in conjunction with familial and cultural information from case files of 1,524 children who had been diagnosed as LD, EMH, ED, multi-handicapped or other by school special services personnel

to determine the discriminative usefulness of these data in differentiating LD from non-LD children. Children were between the ages of 6 years, 0 months and 17 years, 0 months and had been referred by classroom teachers because of learning and/or social adjustment problems. All children were of about average intelligence as measured by performance on the WISC-R with a mean FSIQ score of 87.30 (SD = 15.68).

A series of discriminant functions analyses used CA, MA, grade equivalent scores on the three subtest from the WRAT, WISC-R subtest scores, which members of the special education diagnostic team labeled the child as one of the four diagnostic categories, and expected level of school achievement as the independent variables. Based on the findings from the discriminant analyses, a transpose factor analysis was performed on the same variables to delineate differences in diagnostic criteria which discriminated between groups. The factor analysis was performed on CA groups in intervals of three years beginning with 6 years, 0 months through 17 years, 0 months.

The first analysis revealed that 58.48% of the cases were correctly classified using only these data. However, 69.04% of the children labeled EMH, ED, and multihandicapped were predicted to be LD on the basis of these data. Only the EMH group could be differentiated from the other diagnostic groups with 52% accuracy.

Another discriminant analysis was performed on the total

group of children using the three IQ scores from the WISC-R and the three subtest from the WRAT. A canonical correlation of .540 was obtained. Although 61.37% of the total cases were correctly classified, 77.76% of the children not labeled as LD by the special education team were predicted to be LD on the basis of their psychological profiles (Webster & Schenck 1979).

Finally, two discriminant functions were performed using the WISC-R subtest scales or the three WISC-R IQ scores for subtest scores, which yielded similar results. These were used in combination with CA, MA, grade level in school, expected level of achievement, 40% of expected level of achievement, and the three WRAT subtest scales. Constraints on the population included mental age (MA) between 5-17 years, chronological age (CA) greater than six years, and FSIQ scores equal to 75 or higher. In each instance, 73.07% of the cases were correctly classified, but significant percentages of non-LD children were also predicted to be LD on the basis of these data. Results from these studies indicate the difficulty in discriminating between those children labeled LD, ED, and EMH on the basis of psychological and educational test data.

In North Carolina the use of the standard score discrepancy method to identify LD students for special education has often appeared to discriminate against those children who are called "slow learners". Algozzine and Ysseldyke (1983) found only a slight difference between slow learners and LD children relative to WISC-R Full Scale scores

and achievement test scores. When achievement in school is made commensurate with ability, it clouds the issue. Often the emotional and social growth of children are impaired because of negative environmental factors, thus interfering with their ability to perform. With many tests that only predict placement with slightly better-than-chance accuracy, children who do not fall within these arbitrary guidelines are being discriminated against. Other criteria such as socio-economic characteristics and emotional-social data must be taken into consideration and educational remediations offered to these children.

McKinney (in press) has also expressed concern about the placement of LD students using the standard score method. In comparing the standard score with regression methods, the standard score process is more convenient. However, with standard scores the fact that IQ and achievement are correlated which leads to a biased discrepancy score because regression-to-the-mean for extreme scores in either area is not taken into consideration (McKinney, in press). This can affect the amount of difference which would be considered "significant" for children with lower IQ and/or higher IQ compared to those with average intelligence. The regression equation method predicts academic achievement for individual children from their IQ scores. Another criticism of the regression approach is that its technical complexity does not lend itself to easy practical implementation in typical school assessment programs

(McKinney, in press).

McKinney and Feggans (1986) screened underachievers from a population of 2,986 first and second graders using IQ and achievement tests. To identify the underachievers, total scores from both tests were re-standardized and a regression model used to predict the expected achievement for children in the sample. Residual scores were standardized to provide an index of the IQ/achievement discrepancy. The underachievers represented 17% (n=520) of the population. Of this sample 1.6% (n=49) scored in the mildly retarded range, and 12.6% (n=377) scored in the borderline range.

McKinney recommended that underachievers be considered as a part of the LD category even though their general ability and achievement may be lower. Since failure to perform can be attributed to psychosocial and/or socio-economic factors, McKinney maintained that an IQ/achievement discrepancy alone does not provide an index that is uniquely characteristic of LD children.

While the "cookbook" method of diagnosing children may distinguish between normal and handicapped children, it fails to distinguish the specific subgroups of handicapped learners. About 95% of individual students have test data patterns similar to those of LD youngsters. Diagnostic tests also fail to discriminate among children labeled LD, ED or BEH, and EMH. Often the slow learner, who is affected by motivation, psychosocial, and/or attentional deficits, fails to perform

when given diagnostic tests. The lack of predictability of standardized tests further confuses the diagnostic issue.

With this lack of systematic and objective measurement criteria it is important that psychological and education assessments attend to how the child organizes incoming information, information processing strengths, and specific behavioral deficits during learning. Norm-referenced testing must be supplemented by analysis of the students actual behaviors, learning style and strategies in real-life settings (Webster & Schenck, 1979).

As guidelines became more stringent children who had many LD characteristics did not qualify to continue to receive special services. Most often this was because of an insufficient discrepancy between intellectual ability and academic achievement as measured by standardized test performance (McKinney, in press). Some children who did not qualify for special education placement or who were not identified by classroom teachers as having sufficiently serious learning problems and, subsequently, were not referred may also be at-risk for failure. Ultimately, these inefficient learners may become school failures and problems for the society.

When a child's learning is impaired because of mental, emotional or learning disabilities, it is important that a comprehensive psychoeducational examination be given. The diagnosis of handicapped children should be based on the child's objective performance in a variety of individually

administered diagnostic psychological and educational tests. These test data used in conjunction with familial and cultural information can then be used to determine both diagnosis and the most appropriate educational and psychological placement for a child with learning problems (Webster & Schenck, 1979). Appropriate diagnosis is essential to generate individually designed interventions, proper teaching strategies, and enhance emotional/social growth.

References

Algozzine, B. & Ysseldyke, J. (1983). Learning disabilities as a subtest of school failure: the over-sophistication of a concept. Exceptional Children. 50(3), 242-246.

Conference on Public Preschool Programs for Children from Low Income Families. (1987). Ramey, C. & Niblock, J. (Proceedings Eds.). Chapel Hill: Frank Porter Graham Development Center.

Goodman, J. (1985). Diagnosis and interventions in young children: the continuing gap. The Journal of Psychology. 121(1), 21-35.

Hornbeck, D. (1987). Meeting the needs of at-risk children and youth. Voice of North Carolina School Boards Association. III(2), 22-24.

Lichtenstein, R. (1982). New instrument, old problem for early identification. Exceptional Children. 49(5), 70- 72.

Lichtenstein, R. & Ireton, J. (1984). Preschool Screening: Identifying Young Children with Developmental and Educational Problems. New York: Grune & Stratton.

McKinney, J. (in press). Research on conceptually and emperically derived subtypes of specific learning disabilities. In M. C. Wang, H. J. Walberty, and

M. C. Reynolds (Ed.): The Handbook of Special Education: Research and Practice. Oxford, England: Pergamon Press.

McKinney, J. & Banerjee, C. (1975). Concept attainment by reflective and impulsive children as a function of memory support. Perceptual and Motor Skills. 41, 417-418.

McKinney, J. & Feagans, L. (1984). Academic and behavioral characteristics of learning disabled children and average achievers: longitudinal studies. Leaning Disabilities Quarterly. 7, 251-264.

Webster, R. & Lafayette, A. (1980). Distinguishing among three subgroups of handicapped students using bannatyne's recategorization. Journal of Educational Research. 73, 237-240.

Webster, R. & Schenck, S. (1979). Diagnostic test pattern differences among ld, ed, emh, and multi-handicapped students. Journal of Educational Research. 72, 75-80.